

RE: CIDR Explanation

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From: Andrew Shore (andrew.shore_at_holistecs.com)

Date: 09/21/04

Date: Tue, 21 Sep 2004 11:29:38 +0100

To: "ka55ad" <ka55ad@gmail.com>, <security-basics@securityfocus.com>

A subnet mask simply says how many bits of the address are network and how many are host.

Eg 10.2.3.55 255.255.255.0 means

The network is 10.2.3.0 and this host is 55 on that network

CIDR is just a way to save typing :)

In the above example the mask is 255.255.255.0 each number represents an octet of a 32 bit number (in binary 11111111.11111111.11111111.00000000 3x8 1's and 8 0's) There are 24 1's so 24 bit mask or /24 in CIDR notation. We use the dotted notation because its easier to remember.

If you sub net the above example into two networks (allowing subnet zero) the mask would become 255.255.255.128 in (binary 11111111.11111111.11111111.10000000) which give a /25 CIDR network.

Basically count the 1's in the mask.

Of course this does imply that you have a good grasp of subnetting.

Check out Todd Lamels CCNA book for some good lessons on subnetting

-----Original Message-----

From: ka55ad [<mailto:ka55ad@gmail.com>]

Sent: 20 September 2004 14:39

To: security-basics@securityfocus.com

Subject: CIDR Explanation

Hi List,

I am hoping that somebody might be able to help me out or point me in the right direction. For the life of me I can't seem to get a good grasp on CIDR notation. I see a lot of CIDR addresses every day, but I have trouble figuring out the IP addresses on the fly. I am not a complete newbie – I am quite familiar with the OSI model, TCP

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handshakes, etc but this one area stumps me.

I am particularly interested in it because I am going to be setting up a snort box soon as well as an IP chains firewall to segregate parts of the network. I would much rather use CIDR since it can be much quicker at times, but I don't want to use it right now due to my lack of knowledge which can cause security issues. Can anybody offer advice/help? Thanks.

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